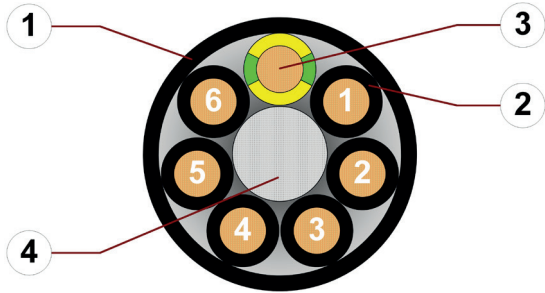


Data sheet

chainflex® CF880



Control cable (Class 3.1.1.1) • For flexing applications • PVC outer jacket • Flame retardant



1. Outer jacket: Pressure extruded PVC mixture
2. Core insulation: Mechanically high-quality PVC mixture
3. Conductor: Stranded conductor consisting of bare copper wires
4. Filling: Plastic yarns

Example image
For detailed overview please see design table

Cable structure

	Conductor	Conductor consisting of bare copper wires (according to DIN EN 60228).
	Core insulation	Mechanically high-quality PVC mixture.
	Core structure	Cores wound with an optimised pitch length.
	Core identification	Black cores with white numbers, one green-yellow core.
	Outer jacket	Low-adhesion PVC mixture, adapted to suit the requirements in e-chains®. Colour: Jet black (similar to RAL 9005) Printing: white

„00000 m⁴** igus chainflex M CF880.--.--① ---② 300/500V E310776

cRUus AWM Style 2464 VW-1 AWM I/II A/B 80°C 300V FT1 EAC/CTP

www.igus.de +++ chainflex cable works +++

* **Length printing:** Not calibrated. Only intended as an orientation aid.
① / ② Cable identification according to Part No. (see technical table).
Example: ... chainflex ... CF880.15.04 ... 4G1.5 ... 300 V/500 V ...



Example image
igus® chainflex® CF880

Data sheet

chainflex® CF880








Control cable (Class 3.1.1.1) • For flexing applications • PVC outer jacket • Flame retardant



Example image

igus® chainflex® CF880

Dynamic information

	Bend radius	e-chain® linear flexible fixed	minimum 12.5 x d minimum 10 x d minimum 7 x d
	Temperature	e-chain® linear flexible fixed	+5 °C up to +70 °C -5 °C up to +70 °C (following DIN EN 60811-504) -15 °C up to +70 °C (following DIN EN 50305)
	v max.	unsupported	3 m/s
	a max.		20 m/s ²
	Travel distance		Unsupported travel distances up to 10 m, Class 1



These values are based on specific applications or tests. They do not represent the limit of what is technically feasible.

Guaranteed service life according to guarantee conditions

Double strokes	1 million	3 million	5 million
Temperature, from/to [°C]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
+5/+15	15	16	17
+15/+60	12.5	13.5	14.5
+60/+70	15	16	17

Minimum guaranteed service life of the cable under the specified conditions.
The installation of the cable is recommended within the middle temperature range.

Electrical information

	Nominal voltage	300/500 V
	Testing voltage	2000 V (following DIN EN 50395)



Control cable (Class 3.1.1.1) • For flexing applications • PVC outer jacket • Flame retardant



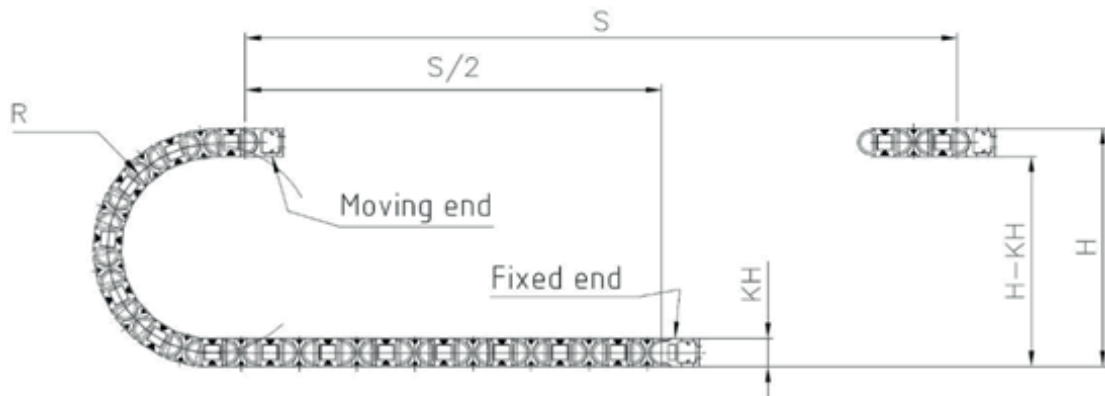
Properties and approvals

	Flame retardant	According to IEC 60332-1-2, CEI 20-35, FT1, VW-1
	Silicone-free	Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992)
	UL/CSA	Style 11008 and 2464, 300 V, 80 °C
	NFA	Following NFA 79-2012, chapter 12.9
	EAC	Certificate No. RU C-DE.ME77.B.01560 (TR ZU)
	CTP	Certificate No. C-DE.PB49.B.00449 (Fire protection)
	Lead-free	Following 2011/65/EC (RoHS-II)
	CE	Following 2014/35/EU



Typical lab test setup for this cable series

Test bend radius R	approx. 75 - 225 mm
Test travel S	approx. 1 - 15 m
Test duration	minimum 2 - 4 million double strokes
Test speed	approx. 0.5 - 2 m / s
Test acceleration	approx. 0.5 - 1.5 m / s ²



Example image
igus® chainflex® CF880

Data sheet

chainflex® CF880



Control cable (Class 3.1.1.1) ● For flexing applications ● PVC outer jacket ● Flame retardant



Example image

Typical application areas

- For flexing applications, Class 3
- Especially for unsupported travels, Class 1
- Without influence of oil, Class 1
- No torsion, Class 1
- Preferably indoor applications
- Wood/stone processing, Packaging industry, supply systems, Handling, adjusting equipment



Technical tables:

Mechanical information

Part No.	Number of cores and conductor nominal cross section [mm ²]	Outer diameter (d) max. [mm]	Copper index [kg/km]	Weight [kg/km]
CF880.05.02	2x0.5	5.5	10	37
CF880.05.03	3G0.5	6.0	15	44
CF880.05.04	4G0.5	6.5	20	53
CF880.05.05	5G0.5	7.0	25	65
CF880.05.07	7G0.5	8.5	35	97
CF880.05.12	12G0.5	9.5	60	141
CF880.05.18	18G0.5	11.5	90	205
CF880.05.25	25G0.5	13.5	124	283
CF880.07.02	2x0.75	6.0	15	46
CF880.07.03	3G0.75	6.5	23	55
CF880.07.04	4G0.75	7.0	30	67
CF880.07.05	5G0.75	7.5	38	82
CF880.07.07	7G0.75	9.0	53	121
CF880.07.12	12G0.75	10.5	90	181
CF880.07.18	18G0.75	13.0	134	269
CF880.07.25	25G0.75	15.0	186	372
CF880.10.02	2x1.0	6.5	20	53
CF880.10.03	3G1.0	6.5	30	66
CF880.10.04	4G1.0	7.0	40	81
CF880.10.05	5G1.0	8.0	50	98
CF880.10.07	7G1.0	9.5	70	149
CF880.10.12	12G1.0	11.5	119	221
CF880.10.18	18G1.0	13.5	178	322
CF880.10.25	25G1.0	16.0	248	454
CF880.15.02	2x1.5	7.5	30	82
CF880.15.03	3G1.5	8.5	45	103
CF880.15.04	4G1.5	9.0	60	127
CF880.15.05	5G1.5	10.0	75	161
CF880.15.07	7G1.5	12.5	104	243
CF880.15.12	12G1.5	14.5	178	360
CF880.15.18	18G1.5	17.5	267	530
CF880.15.25	25G1.5	21.0	371	743
CF880.25.03	3G2.5	9.0	75	143
CF880.25.04	4G2.5	10.0	100	183
CF880.25.05	5G2.5	11.5	124	226
CF880.25.07	7G2.5	14.0	174	343
CF880.25.12	12G2.5	16.5	297	513
CF880.25.25 ¹⁾	25G2.5	24.0	612	1064

Example image

igus® chainflex® CF880

¹⁾ Phase-out model

Note: The given outer diameters are maximum values and may tend toward lower tolerance limits.

G = with green-yellow earth core **x** = without earth core



Data sheet

chainflex® CF880



Control cable (Class 3.1.1.1) • For flexing applications • PVC outer jacket • Flame retardant



Example image

Electrical information

Conductor nominal cross section [mm ²]	Maximum conductor resistance at 20 °C (following DIN EN 50289-1-2) [Ω/km]	Maximum current rating at 30 °C (following DIN VDE 0298-4) [A]
0.5	39.0	8
0.75	26.0	12
1	19.5	15
1.5	13.3	18
2.5	8.0	26

The final maximum current rating depends among other things on the ambient conditions, the type of the installation and the number of loaded cores.



Data sheet

chainflex® CF880



Control cable (Class 3.1.1.1) • For flexing applications • PVC outer jacket • Flame retardant



Design table

Part No.	Number of cores	Core design	Part No.	Number of cores	Core design
CF880.XX.02	2		CF880.XX.07	7	
CF880.XX.03	3		CF880.XX.12	12	
CF880.XX.04	4		CF880.XX.18	18	
CF880.XX.05	5		CF880.XX.25	25	



Example image

igus® chainflex® CF880